

IN THE DRAWINGS

Please replace the drawing FIG. 1 with the drawing sheet labeled FIG. 1 attached herewith as a separate page.

Please add drawings FIG. 2A, FIG. 2B, FIG. 2C, FIG. 3, FIG. 3A, FIG. 3B, FIG. 3C, FIG. 3D, FIG. 3E, attached herewith on two drawing sheets as new drawings.

Attachment: Replacement Sheets

BASIS FOR THE AMENDMENT

Claims 5-9 and 17-2 are active in the present application. Claims 18-24 are currently withdrawn from prosecution. Claim 25 is a new claim. Support for new Claim 25 is found on page 6, lines 3-5 and 9-11. Claim 1 has been amended for clarity. The specification has been amended for matters of form. The specification has been amended on page 5 to include a brief description of new drawings Fig. 2A, Fig. 2B, Fig. 2C, and Fig. 3; and new Fig. 3A, Fig. 3B, Fig. 3C, Fig. 3D, and Fig. 3E. Support for amended Fig. 1 is found in original Fig. 1. Support for new Figs. 2A, 2B, 2C, and Figs. 3A, 3B, 3C, 3D and 3E is found throughout the original specification. No new matter is believed to have been added by this amendment.

REQUEST FOR RECONSIDERATION

Applicants thank Examiner Miller for the helpful and courteous discussion of May 10, 2005. During the discussion, Applicants' U.S. representative presented arguments that an optical recording medium having a print-receiving layer having a pattern of concaves and/or convexes formed therein and/or formed thereon cannot be rendered obvious by the prior art relied upon by the Office on the grounds that the convex/concave pattern of the print-receiving layer of the claimed optical recording medium is a feature nowhere disclosed or suggested in the prior art cited by the Office.

Present independent Claim 5 is drawn to an optical recording medium which has a print-receiving layer as an outermost layer. The print-receiving layer has a pattern of concaves and/or convexes. Importantly, as recited in present Claim 5 "the pattern is at least one of formed in or formed of the cured resin". Thus the pattern of concaves and/or convexes recited in present independent Claim 5 is a pattern that is made of the cured resin which forms the print-receiving layer. In embodiments, one may envision that a convex can be formed by the removal of a portion of the surface of the print-receiving layer. Similarly, a concave may be formed by a bump of the cured resin present on the surface of the print-receiving layer.

The convexes and/or concaves present on the print-receiving layer may form a pattern that is visually recognizable by the naked eye (page 19, lines 5-18). The pattern of concaves and/or convexes can represent, for example, a character, a figure or a symbol such as, for example, a trademark. The presence of the pattern of concaves and/or convexes allows a manufacturer of the optical recording medium to mark the optical recording medium with a trademark or other feature that is visually recognizable and identifiable by the end user and thereby distinguish and differentiate what may otherwise be regarded as a generic commodity-type product from other optical recording media.

In the absence of such a pattern a consumer may not be able to tell whether any particular optical recording medium is from a manufacturer known for providing a quality product or from a manufacturer offering a cheap product that is known to be defect-ridden. Thus the invention optical recording medium provides substantial benefits to both the manufacturer and the consumer in comparison to prior art optical recording media (e.g., standard compact disks).

The ability to mark the optical recording medium with a visually recognizable pattern of concaves and/or convexes offers some substantial benefits in comparison to marking an optical recording medium with only inks or printing techniques. For example, if the manufacturer of the optical recording medium were to ink print a trademark on the print-receiving layer, any ink subsequently applied, such as the ink that may be applied to an optical recording medium to identify the contents of the optical recording medium (e.g., a "record" label), may interfere therewith. For example, the application of two layers of printing inks may cause the inks to dissolve in one another and blur or otherwise obscure the upper layer of ink. The invention optical recording medium which utilizes a pattern of concaves and/or convexes to provide a visually recognizable pattern avoids the problems of multiple ink print layers.

When one inspects a conventional, commercially available optical recording medium such as a DVD it is readily apparent that there is no pattern on at least the light incidence side of the optical recording medium. Inspection of the print-receiving layer of a DVD may indicate some texture caused by printing an ink thereon. However, this texture is not the claimed pattern of concaves and/or convexes of the present claims because it is not formed in or formed of the resin which forms the print-receiving layer but is rather formed by the inks which are deposited on the print-receiving layer. As a consequence, the only information that is visually recognizable on the print-receiving layer is that information applied by the

recording artist, recording studio, etc. that identifies the content stored on the optical recording medium (e.g., DVD).

In the presently claimed invention the pattern comprises the same matrix matter (i.e., cured resin) that comprises the matrix of the print-receiving layer or the subsidiary layer under the print-receiving layer. This is depicted graphically in new Figure 3 which shows how certain features on the surface of the print-receiving layer are made of (e.g., consist of three dimensionally) the same resin that makes up the major portion of the print-receiving layer.

Therefore the pattern of the present claims is one that is formed directly in the matrix of the surface of the print-receiving layer directly or via the pattern formed by the subsidiary layer. The concave portions of the pattern may be areas of the cured resin that are higher than the rest of the surface of the cured resin. The convexes of the pattern may be areas of the surface of the light incidence layer that are “dug out” from the matrix.

The Office has asserted that the presently claimed optical recording medium is obvious in view of the disclosure of Fujio (JP 2000-57635). On page 8, beginning at line 1 of the Office Action of April 22, 2005, the Office admits that Fujio “is expressly silent as to the pattern including convexes and concaves”. It appears that the Office is alleging that a printable pattern present on the surface of an optical recording medium renders obvious the claimed optical recording medium.

Applicants note that Drawing 1 of Fujio has three reference numerals 1, 2 and 3. Each of reference numerals 1 and 2 indicate different colors (i.e., color A and color B, respectively). Thus Fujio may describe a conventional optical recording medium wherein different patterns may be formed on the print-receiving layer by applying different colors or different printed patterns. As was mentioned above, this conventional technique of marking an optical recording medium is unable to provide the advantages of the claimed optical

recording medium which permits the print receiving layer to display a visually recognizable pattern (e.g., a pattern of a raised or lowered area on the print-receiving layer) and concurrently a printed pattern printed on the pattern of concaves and/or convexes.

Applicants submit that the presently claimed optical recording medium has a structural feature that is not disclosed or suggested by the prior art relied upon by the Office. Namely, the claimed optical recording medium requires the presence of a pattern of concaves and/or convexes on the print-receiving layer where the pattern is formed from the same resin that makes up the print-receiving layer. Applicants submit that the Drawing 1 of Fujio does not suggest the claimed invention because Fujio discloses a pattern that is made up of different colors and which may be printed upon a substrate such as a print-receiving layer of an optical recording medium. Even if the inks applied to the print-receiving layer of Fujio form a pattern of concaves and/or convexes, this does not suggest the feature of the claimed invention wherein the pattern must be made of the tiered resin that also forms the print-receiving layer.

Moreover, even if the prior art inks are able to penetrate and stain the resin matrix, the prior art does not meet the present claim limitations because the pattern must be formed in or formed of the cured resin, the presence of any ink is not relevant.

The Office rejected Claims 5-9 and 17 as failing to comply with the written description requirement under 35 U.S.C. § 112, first paragraph. The Office asserts that the limitation that the print-receiving layer has a pattern of concaves, convexes or a combination thereof was not described in the specification as originally filed. The Office states:

There is no disclosure of having either, i.e., not both, convexes and concaves in a print-receiving pattern.

Applicants traverse the Office's assertion by drawing the Office's attention to original Claim 5 which contains the limitation "wherein a pattern is formed on the print-receiving layer by concaves or convexes". Applicants submit that the terms of original Claim 5 include

the word “or” which indicates that either the concaves or convexes may form the pattern of the print-receiving layer. Convexes are further provided as an alternative to concaves by use of the word “or” at page 19, lines 19-21. Applicants therefore submit that the specification as originally filed discloses that either convexes or concaves may make up the pattern of the print-receiving layer.

The Office rejected Claim 9 on the grounds that “there is no disclosure of a second layer in contact with a print receiving layer ...” Applicants draw the Office’s attention to original Claim 9 which is reproduced below for convenience.

9. The optical recording medium according to Claim 8, wherein a pattern by concaves or convexes is formed on a layer which is in contact with the print-receiving layer, and said pattern is same as the concave/convex pattern on the print-receiving layer.

Original Claim 9 refers to two layers (i) the print-receiving layer, and (ii) a layer which is in contact with the print-receiving layer. In Claim 9 submitted with the Preliminary Amendment upon filing of the present Divisional application the layer (ii) (i.e., a layer which is in contact with the print-receiving layer) is identified as “a second layer”. The second layer is explicitly described as being in contact with the print-receiving layer in original Claim 9. It is further recited in Claim 9 that the pattern of the second layer (i.e., a layer which is in contact with the print-receiving layer) is the same as the “pattern on the print-receiving layer”. Applicants therefore submit that Claim 9 is described in the specification as originally filed and the rejection under 35 U.S.C. § 112, first paragraph is not supportable and should be withdrawn. Applicants draw the Office’s attention to new Claim 25 which recites an optical recording medium having a subsidiary layer (see page 6, lines 9-11 of the present specification).

The Office further rejected Claims 5, 9 and 17 as indefinite under 35 U.S.C. § 112, second paragraph. Applicants submit that the amendment to Claim 5 obviates the rejection.

Further, Applicants submit that a pattern having only concave or only convexes may not be misdescriptive. For example, one may envision a flat surface in which there is one "divot". Such a single-convex pattern would not necessarily have any corresponding concave. Likewise one can envision a flat surface having a single bump. This single-bump pattern may not have any corresponding convex. Therefore it is possible to have a contrasting pattern wherein the contrast exists between the flat surface and whatever concave or convex feature is present on the flat surface to thereby provide a pattern. Applicants submit the rejection under 35 U.S.C. § 112, second paragraph is not supportable and should be withdrawn.

Applicants therefore submit the presently claimed optical recording medium is novel and not obvious in view of the prior art relied upon by the Office and respectfully request the withdrawal of any rejections in view of the cited prior art.

Applicants submit the amendment to the claims and remarks above are probative of the patentability of the claimed invention and respectfully request the allowance of all now-pending claims.

Respectfully submitted,

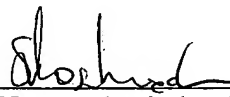
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